



# STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR  
KIM REYNOLDS, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES  
CHUCK GIPP, DIRECTOR

**STATE OF IOWA  
DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROGRAM  
AMENDMENT TO NPDES PERMIT**

Iowa NPDES Permit #	5715001
Date of Issuance:	January 5, 2011
Date of Expiration:	January 4, 2016
Date of this Amendment:	<b><u>November 1, 2014</u></b>
EPA NUMBER:	IA0042641

**Name and Mailing Address of Applicant:**

CITY OF CEDAR RAPIDS  
101 FIRST STREET SE  
CEDAR RAPIDS, IA 52401

**Identity and Location of Facility:**

Cedar Rapids - STP  
7525 Bertram Road SE  
Cedar Rapids, IA 52403

Township 83N, Range 06W, Section 32, Linn County

Pursuant to the authority of Iowa Code Section 455B.174, and of Rule 567--64.3, Iowa Administrative Code, the Director of the Iowa Department of Natural Resources issued the above referenced permit. Pursuant to the same authority the Director hereby amends said permit as set forth below:

The permit is being amended to add Outfall 117 to the draft permit. This outfall contains limits for shoreline discharge when the Cedar River is at or above 12,900 cfs at the 8<sup>th</sup> Avenue USGS gauge. The description for Outfall 004 has been changed to reflect that the limits are applicable when a shoreline discharge occurs and the Cedar River is below 12,900 cfs at the 8<sup>th</sup> Avenue USGS gauge. Please replace your current permit with the enclosed permit.

For the Department of Natural Resources:

By \_\_\_\_\_  
Eric Wiklund  
NPDES Section

ENVIRONMENTAL SERVICES DIVISION

**IOWA DEPARTMENT OF NATURAL RESOURCES**  
**National Pollutant Discharge Elimination System (NPDES) Permit**

**OWNER NAME & ADDRESS**

CITY OF CEDAR RAPIDS  
101 FIRST STREET SE  
CEDAR RAPIDS, IA 52401

**FACILITY NAME & ADDRESS**

CEDAR RAPIDS CITY OF STP  
7525 BERTRAM ROAD SE  
CEDAR RAPIDS, IA 52403

Section 32, T83N, R06W  
Linn County

**IOWA NPDES PERMIT NUMBER:** 5715001  
**DATE OF ISSUANCE:** 01/05/2011  
**DATE OF EXPIRATION:** 01/04/2016

**YOU ARE REQUIRED TO FILE FOR  
RENEWAL OF THIS PERMIT BY:** 07/08/2015  
**EPA NUMBER:** IA0042641

This permit is issued pursuant to the authority of section 402(b) of the Clean Water Act (33 U.S.C 1342(b)), Iowa Code section 455B.174, and rule 567-64.3, Iowa Administrative Code. You are authorized to operate the disposal system and to discharge the pollutants specified in this permit in accordance with the effluent limitations, monitoring requirements and other terms set forth in this permit.

You may appeal any condition of this permit by filing a written notice of appeal and request for administrative hearing with the director of this department within 30 days of your receipt of this permit.

Any existing unexpired Iowa operation permit or Iowa NPDES permit previously issued by the department for the facility identified above is revoked by the issuance of this permit. This provision does not apply to any authorization to discharge under the terms and conditions of a general permit issued by the department or to any permit issued exclusively for the discharge of stormwater.

FOR THE DEPARTMENT OF NATURAL RESOURCES

By \_\_\_\_\_

Eric Wiklund  
NPDES Section  
ENVIRONMENTAL SERVICES DIVISION

**Facility Name:** CEDAR RAPIDS CITY OF STP

**Permit Number:** 5715001

**Outfall No.:** 001 DIFFUSER DISCHARGE FROM A TRICKLING FILTER/ACTIVATED SLUDGE WASTEWATER TREATMENT PLANT

**Receiving Stream:** CEDAR RIVER

**Route of Flow:** CEDAR RIVER

Class A1 waters are primary contact recreational use waters in which recreational or other uses may result in prolonged and direct contact with the water, involving considerable risks of ingesting water in quantities sufficient to pose a health hazard. Such activities would include, but not be limited to, swimming, diving, water skiing, and water contact recreational canoeing.

Waters designated Class B(WW1) are those in which temperature, flow and other habitat characteristics are suitable to maintain warm water game fish populations along with a resident aquatic community that includes a variety of native nongame fish and invertebrates species. These waters generally include border rivers, large interior rivers, and the lower segments of medium-size tributary streams.

Waters designated Class HH are those in which fish are routinely harvested for human consumption or waters both designated as a drinking water supply and in which fish are routinely harvested for human consumption.

**Outfall No.:** 004 SHORELINE DISCHARGE FROM A TRICKLING FILTER/ACTIVATED SLUDGE WASTEWATER TREATMENT PLANT

**Receiving Stream:** CEDAR RIVER

**Route of Flow:** CEDAR RIVER

Class A1 waters are primary contact recreational use waters in which recreational or other uses may result in prolonged and direct contact with the water, involving considerable risks of ingesting water in quantities sufficient to pose a health hazard. Such activities would include, but not be limited to, swimming, diving, water skiing, and water contact recreational canoeing.

Waters designated Class B(WW1) are those in which temperature, flow and other habitat characteristics are suitable to maintain warm water game fish populations along with a resident aquatic community that includes a variety of native nongame fish and invertebrates species. These waters generally include border rivers, large interior rivers, and the lower segments of medium-size tributary streams.

Waters designated Class HH are those in which fish are routinely harvested for human consumption or waters both designated as a drinking water supply and in which fish are routinely harvested for human consumption.

**Outfall No.:** 117 COMBINED SHORELINE AND DIFFUSER DISCHARGE FROM A TRICKLING FILTER/ACTIVATED SLUDGE WASTEWATER TREATMENT PLANT WHEN CEDAR RIVER FLOW AT UPSTREAM USGS GAUGE IS GREATER THAN 12,900 CFS.

**Receiving Stream:** CEDAR RIVER

**Route of Flow:** CEDAR RIVER

Class A1 waters are primary contact recreational use waters in which recreational or other uses may result in prolonged and direct contact with the water, involving considerable risks of ingesting water in quantities sufficient to pose a health hazard. Such activities would include, but not be limited to,

**Facility Name:** CEDAR RAPIDS CITY OF STP

**Permit Number:** 5715001

swimming, diving, water skiing, and water contact recreational canoeing.

Waters designated Class B(WW1) are those in which temperature, flow and other habitat characteristics are suitable to maintain warm water game fish populations along with a resident aquatic community that includes a variety of native nongame fish and invertebrates species. These waters generally include border rivers, large interior rivers, and the lower segments of medium-size tributary streams.

Waters designated Class HH are those in which fish are routinely harvested for human consumption or waters both designated as a drinking water supply and in which fish are routinely harvested for human consumption.

**Bypasses from any portion of a treatment facility or from a sanitary sewer collection system designed to carry only sewage are prohibited.**

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**Effluent Limitations:**

You are prohibited from discharging pollutants except in compliance with the following effluent limitations:

**001 DIFFUSER DISCHARGE FROM A TRICKLING FILTER/ACTIVATED SLUDGE WASTEWATER TREATMENT PLANT**

*Outfall: 001 Effective Dates: 01/05/2011 to 01/04/2016*

<u>Parameter</u>	<u>Season</u>	<u>Limit Type</u>	<u>Limits</u>
<b>CBOD5</b>			<b>85% Removal Required</b>
	Yearly	30 Day Average	113 MG/L
	Yearly	Daily Maximum	277 MG/L
<b>TOTAL SUSPENDED SOLIDS</b>			<b>85% Removal Required</b>
	Yearly	30 Day Average	120 MG/L 56045 LBS/DAY
	Yearly	Daily Maximum	200 MG/L 93048 LBS/DAY
<b>PH (MINIMUM - MAXIMUM)</b>			
	Yearly	Daily Maximum	9.0 STD UNITS
	Yearly	Minimum	6.0 STD UNITS
<b>ZINC, TOTAL (AS ZN)</b>			
	Yearly	30 Day Average	0.55 MG/L 257 LBS/DAY
	Yearly	Daily Maximum	0.55 MG/L 257 LBS/DAY
<b>CADMIUM, TOTAL (AS CD)</b>			
	Yearly	30 Day Average	0.001 MG/L 0.646 LBS/DAY
	Yearly	Daily Maximum	0.01 MG/L 4.6 LBS/DAY
<b>CHLORINE, TOTAL RESIDUAL</b>			
	MAR	30 Day Average	0.1 MG/L 48 LBS/DAY
	MAR	Daily Maximum	0.15 MG/L 68 LBS/DAY
	APR	30 Day Average	0.1 MG/L 48 LBS/DAY
	APR	Daily Maximum	0.15 MG/L 68 LBS/DAY
	MAY	30 Day Average	0.1 MG/L 48 LBS/DAY

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Outfall: 001 Effective Dates: 01/05/2011 to 01/04/2016			
Parameter	Season	Limit Type	Limits
<b>CHLORINE, TOTAL RESIDUAL</b>			
	MAY	Daily Maximum	0.15 MG/L 68 LBS/DAY
	JUN	30 Day Average	0.1 MG/L 48 LBS/DAY
	JUN	Daily Maximum	0.15 MG/L 68 LBS/DAY
	JUL	30 Day Average	0.1 MG/L 48 LBS/DAY
	JUL	Daily Maximum	0.15 MG/L 68 LBS/DAY
	AUG	30 Day Average	0.1 MG/L 48 LBS/DAY
	AUG	Daily Maximum	0.15 MG/L 68 LBS/DAY
	SEP	30 Day Average	0.1 MG/L 48 LBS/DAY
	SEP	Daily Maximum	0.15 MG/L 68 LBS/DAY
	OCT	30 Day Average	0.1 MG/L 48 LBS/DAY
	OCT	Daily Maximum	0.15 MG/L 68 LBS/DAY
	NOV	30 Day Average	0.1 MG/L 48 LBS/DAY
	NOV	Daily Maximum	0.15 MG/L 68 LBS/DAY
<b>MERCURY, TOTAL (AS HG)</b>			
	Yearly	30 Day Average	0.0008 MG/L 0.359 LBS/DAY
	Yearly	Daily Maximum	0.008 MG/L 3.51 LBS/DAY
<b>SELENIUM, TOTAL (AS SE)</b>			
	Yearly	30 Day Average	0.026 MG/L 12 LBS/DAY
	Yearly	Daily Maximum	0.088 MG/L 41.3 LBS/DAY
<b>COPPER, TOTAL (AS CU)</b>			
	Yearly	30 Day Average	0.03 MG/L 14.1 LBS/DAY
	Yearly	Daily Maximum	0.049 MG/L 22.9 LBS/DAY

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<i>Outfall: 001 Effective Dates: 01/05/2011 to 01/04/2016</i>			
<u>Parameter</u>	<u>Season</u>	<u>Limit Type</u>	<u>Limits</u>
<b>AMMONIA NITROGEN LBS/CFS STREAMFLOW</b>			
	JAN	30 Day Average	11.5 LBS/CFS/D
	JAN	Daily Maximum	16.3 LBS/CFS/D
	FEB	30 Day Average	11.5 LBS/CFS/D
	FEB	Daily Maximum	16.3 LBS/CFS/D
	MAR	30 Day Average	4.5 LBS/CFS/D
	MAR	Daily Maximum	6.4 LBS/CFS/D
	APR	30 Day Average	4.5 LBS/CFS/D
	APR	Daily Maximum	6.4 LBS/CFS/D
	MAY	30 Day Average	4.5 LBS/CFS/D
	MAY	Daily Maximum	6.4 LBS/CFS/D
	JUN	30 Day Average	3.6 LBS/CFS/D
	JUN	Daily Maximum	6.4 LBS/CFS/D
	JUL	30 Day Average	4.7 LBS/CFS/D
	JUL	Daily Maximum	7.7 LBS/CFS/D
	AUG	30 Day Average	4.2 LBS/CFS/D
	AUG	Daily Maximum	7.7 LBS/CFS/D
	SEP	30 Day Average	4.2 LBS/CFS/D
	SEP	Daily Maximum	6.4 LBS/CFS/D
	OCT	30 Day Average	4.5 LBS/CFS/D
	OCT	Daily Maximum	6.4 LBS/CFS/D
	NOV	30 Day Average	4.5 LBS/CFS/D
	NOV	Daily Maximum	6.4 LBS/CFS/D
	DEC	30 Day Average	4.5 LBS/CFS/D
	DEC	Daily Maximum	6.4 LBS/CFS/D
<b>CBOD5 LB/DAY/CFS</b>			
	Yearly	30 Day Average	20 LBS/CFS/D
	Yearly	Daily Maximum	20 LBS/CFS/D

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<b>Outfall: 001 Effective Dates: 01/05/2011 to 01/04/2016</b>			
<b><u>Parameter</u></b>	<b><u>Season</u></b>	<b><u>Limit Type</u></b>	<b><u>Limits</u></b>
<b>ACUTE TOXICITY, CERIODAPHNIA</b>			
	Yearly	30 Day Average	1 NO TOXICITY
<b>ACUTE TOXICITY, PIMEPHALES</b>			
	Yearly	30 Day Average	1 NO TOXICITY
<b>E. COLI</b>			
	MAR	30 Day Average	126 #/100 ML
	APR	30 Day Average	126 #/100 ML
	MAY	30 Day Average	126 #/100 ML
	JUN	30 Day Average	126 #/100 ML
	JUL	30 Day Average	126 #/100 ML
	AUG	30 Day Average	126 #/100 ML
	SEP	30 Day Average	126 #/100 ML
	OCT	30 Day Average	126 #/100 ML
	NOV	30 Day Average	126 #/100 ML



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**004 SHORELINE DISCHARGE FROM A TRICKLING FILTER/ACTIVATED SLUDGE WASTEWATER TREATMENT PLANT**

Outfall: 004 Effective Dates: 01/05/2011 to 01/04/2016				
Parameter	Season	Limit Type	Limits	
CBOD5				
	Yearly	30 Day Average	113 MG/L	
	Yearly	Daily Maximum	277 MG/L	
TOTAL SUSPENDED SOLIDS				
	Yearly	30 Day Average	120 MG/L 56045 LBS/DAY	
	Yearly	Daily Maximum	200 MG/L 93048 LBS/DAY	
ZINC, TOTAL (AS ZN)				
	Yearly	30 Day Average	0.133 MG/L 62 LBS/DAY	
	Yearly	Daily Maximum	0.133 MG/L 62 LBS/DAY	
CADMIUM, TOTAL (AS CD)				
	Yearly	30 Day Average	0.001 MG/L 0.29 LBS/DAY	
	Yearly	Daily Maximum	0.002 MG/L 1.11 LBS/DAY	
CHLORIDE (AS CL)				
	Yearly	30 Day Average	695 MG/L 342779 LBS/DAY	
	Yearly	Daily Maximum	695 MG/L 342779 LBS/DAY	
CHLORINE, TOTAL RESIDUAL				
	MAR	30 Day Average	0.25 MG/L 118 LBS/DAY	
	MAR	Daily Maximum	0.32 MG/L 150 LBS/DAY	
	APR	30 Day Average	0.25 MG/L 118 LBS/DAY	
	APR	Daily Maximum	0.32 MG/L 150 LBS/DAY	
	MAY	30 Day Average	0.25 MG/L 118 LBS/DAY	

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<i>Outfall: 004 Effective Dates: 01/05/2011 to 01/04/2016</i>			
<u>Parameter</u>	<u>Season</u>	<u>Limit Type</u>	<u>Limits</u>
<b>CHLORINE, TOTAL RESIDUAL</b>			
	MAY	Daily Maximum	0.32 MG/L 150 LBS/DAY
	JUN	30 Day Average	0.25 MG/L 118 LBS/DAY
	JUN	Daily Maximum	0.32 MG/L 150 LBS/DAY
	JUL	30 Day Average	0.25 MG/L 118 LBS/DAY
	JUL	Daily Maximum	0.32 MG/L 150 LBS/DAY
	AUG	30 Day Average	0.25 MG/L 118 LBS/DAY
	AUG	Daily Maximum	0.32 MG/L 150 LBS/DAY
	SEP	30 Day Average	0.25 MG/L 118 LBS/DAY
	SEP	Daily Maximum	0.32 MG/L 150 LBS/DAY
	OCT	30 Day Average	0.25 MG/L 118 LBS/DAY
	OCT	Daily Maximum	0.32 MG/L 150 LBS/DAY
	NOV	30 Day Average	0.25 MG/L 118 LBS/DAY
	NOV	Daily Maximum	0.32 MG/L 150 LBS/DAY
<b>CHROMIUM, HEXAVALENT (AS CR)</b>			
	Yearly	30 Day Average	0.018 MG/L 8.31 LBS/DAY
	Yearly	Daily Maximum	0.018 MG/L 8.31 LBS/DAY

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<b>Outfall: 004 Effective Dates: 01/05/2011 to 01/04/2016</b>			
<b><u>Parameter</u></b>	<b><u>Season</u></b>	<b><u>Limit Type</u></b>	<b><u>Limits</u></b>
<b>CYANIDE, TOTAL (AS CN)</b>			
	Yearly	30 Day Average	0.012 MG/L 5.56 LBS/DAY
	Yearly	Daily Maximum	0.025 MG/L 11.4 LBS/DAY
<b>MERCURY, TOTAL (AS HG)</b>			
	Yearly	30 Day Average	0.0003 MG/L 0.16 LBS/DAY
	Yearly	Daily Maximum	0.002 MG/L 0.85 LBS/DAY
<b>SELENIUM, TOTAL (AS SE)</b>			
	Yearly	30 Day Average	0.011 MG/L 5.34 LBS/DAY
	Yearly	Daily Maximum	0.022 MG/L 10 LBS/DAY
<b>SILVER, TOTAL (AS AG)</b>			
	Yearly	30 Day Average	0.004 MG/L 2.08 LBS/DAY
	Yearly	Daily Maximum	0.004 MG/L 2.08 LBS/DAY
<b>COPPER, TOTAL (AS CU)</b>			
	Yearly	30 Day Average	0.015 MG/L 7.05 LBS/DAY
	Yearly	Daily Maximum	0.015 MG/L 7.05 LBS/DAY
<b>LEAD, TOTAL (AS PB)</b>			
	Yearly	30 Day Average	0.007 MG/L 3.42 LBS/DAY
	Yearly	Daily Maximum	0.091 MG/L 42 LBS/DAY
<b>AMMONIA NITROGEN LBS/CFS STREAMFLOW</b>			
	JAN	30 Day Average	1.9 LBS/CFS/D
	JAN	Daily Maximum	1.9 LBS/CFS/D
	FEB	30 Day Average	1.8 LBS/CFS/D

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<i>Outfall: 004 Effective Dates: 01/05/2011 to 01/04/2016</i>			
<u>Parameter</u>	<u>Season</u>	<u>Limit Type</u>	<u>Limits</u>
<b>AMMONIA NITROGEN LBS/CFS STREAMFLOW</b>			
	FEB	Daily Maximum	1.8 LBS/CFS/D
	MAR	30 Day Average	1.9 LBS/CFS/D
	MAR	Daily Maximum	1.9 LBS/CFS/D
	APR	30 Day Average	1.9 LBS/CFS/D
	APR	Daily Maximum	1.9 LBS/CFS/D
	MAY	30 Day Average	1.8 LBS/CFS/D
	MAY	Daily Maximum	1.9 LBS/CFS/D
	JUN	30 Day Average	1.1 LBS/CFS/D
	JUN	Daily Maximum	1.8 LBS/CFS/D
	JUL	30 Day Average	1.5 LBS/CFS/D
	JUL	Daily Maximum	2.3 LBS/CFS/D
	AUG	30 Day Average	1.3 LBS/CFS/D
	AUG	Daily Maximum	2.1 LBS/CFS/D
	SEP	30 Day Average	1.3 LBS/CFS/D
	SEP	Daily Maximum	2.1 LBS/CFS/D
	OCT	30 Day Average	2 LBS/CFS/D
	OCT	Daily Maximum	2 LBS/CFS/D
	NOV	30 Day Average	1.8 LBS/CFS/D
	NOV	Daily Maximum	1.8 LBS/CFS/D
	DEC	30 Day Average	2 LBS/CFS/D
	DEC	Daily Maximum	2 LBS/CFS/D

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<b>Outfall: 004 Effective Dates: 01/05/2011 to 01/04/2016</b>			
<u>Parameter</u>	<u>Season</u>	<u>Limit Type</u>	<u>Limits</u>
<b>CBOD5 LB/DAY/CFS</b>			
	Yearly	30 Day Average	20 LBS/CFS/D
	Yearly	Daily Maximum	20 LBS/CFS/D
<b>PH</b>			
	Yearly	Daily Maximum	9 STD UNITS
	Yearly	Minimum	6.5 STD UNITS
<b>E. COLI</b>			
	MAR	30 Day Average	126 #/100 ML
	APR	30 Day Average	126 #/100 ML
	MAY	30 Day Average	126 #/100 ML
	JUN	30 Day Average	126 #/100 ML
	JUL	30 Day Average	126 #/100 ML
	AUG	30 Day Average	126 #/100 ML
	SEP	30 Day Average	126 #/100 ML
	OCT	30 Day Average	126 #/100 ML
	NOV	30 Day Average	126 #/100 ML

Facility Name: CEDAR RAPIDS CITY OF STP

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**117 COMBINED SHORELINE AND DIFFUSER DISCHARGE FROM A TRICKLING FILTER/ACTIVATED SLUDGE WASTEWATER TREATMENT PLANT WHEN CEDAR RIVER FLOW AT UPSTREAM USGS GAUGE IS GREATER THAN 12,900 CFS.**

<i>Outfall: 117 Effective Dates: 01/05/2011 to 01/04/2016</i>			
<u>Parameter</u>	<u>Season</u>	<u>Limit Type</u>	<u>Limits</u>
<b>CBOD5</b>			
	Yearly	30 Day Average	113 MG/L
	Yearly	Daily Maximum	277 MG/L
<b>TOTAL SUSPENDED SOLIDS</b>			
	Yearly	30 Day Average	120 MG/L 56045 LBS/DAY
	Yearly	Daily Maximum	200 MG/L 93048 LBS/DAY
<b>PH (MINIMUM - MAXIMUM)</b>			
	Yearly	Daily Maximum	9.0 STD UNITS
	Yearly	Minimum	6.0 STD UNITS
<b>ZINC, TOTAL (AS ZN)</b>			
	Yearly	30 Day Average	0.55 MG/L 257 LBS/DAY
	Yearly	Daily Maximum	0.55 MG/L 257 LBS/DAY
<b>CADMIUM, TOTAL (AS CD)</b>			
	Yearly	30 Day Average	0.001 MG/L 0.646 LBS/DAY
	Yearly	Daily Maximum	0.01 MG/L 4.6 LBS/DAY
<b>CHLORINE, TOTAL RESIDUAL</b>			
	MAR	30 Day Average	0.1 MG/L 48 LBS/DAY
	MAR	Daily Maximum	0.15 MG/L 68 LBS/DAY
	APR	30 Day Average	0.1 MG/L 48 LBS/DAY
	APR	Daily Maximum	0.15 MG/L 68 LBS/DAY
	MAY	30 Day Average	0.1 MG/L 48 LBS/DAY

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<i>Outfall: 117 Effective Dates: 01/05/2011 to 01/04/2016</i>			
<u>Parameter</u>	<u>Season</u>	<u>Limit Type</u>	<u>Limits</u>
<b>CHLORINE, TOTAL RESIDUAL</b>			
	MAY	Daily Maximum	0.15 MG/L 68 LBS/DAY
	JUN	30 Day Average	0.1 MG/L 48 LBS/DAY
	JUN	Daily Maximum	0.15 MG/L 68 LBS/DAY
	JUL	30 Day Average	0.1 MG/L 48 LBS/DAY
	JUL	Daily Maximum	0.15 MG/L 68 LBS/DAY
	AUG	30 Day Average	0.1 MG/L 48 LBS/DAY
	AUG	Daily Maximum	0.15 MG/L 68 LBS/DAY
	SEP	30 Day Average	0.1 MG/L 48 LBS/DAY
	SEP	Daily Maximum	0.15 MG/L 68 LBS/DAY
	OCT	30 Day Average	0.1 MG/L 48 LBS/DAY
	OCT	Daily Maximum	0.15 MG/L 68 LBS/DAY
	NOV	30 Day Average	0.1 MG/L 48 LBS/DAY
	NOV	Daily Maximum	0.15 MG/L 68 LBS/DAY
<b>MERCURY, TOTAL (AS HG)</b>			
	Yearly	30 Day Average	0.0008 MG/L 0.359 LBS/DAY
	Yearly	Daily Maximum	0.008 MG/L 3.51 LBS/DAY
<b>SELENIUM, TOTAL (AS SE)</b>			
	Yearly	30 Day Average	0.026 MG/L 12 LBS/DAY
	Yearly	Daily Maximum	0.088 MG/L 41.3 LBS/DAY
<b>COPPER, TOTAL (AS CU)</b>			
	Yearly	30 Day Average	0.03 MG/L 14.1 LBS/DAY
	Yearly	Daily Maximum	0.049 MG/L 22.9 LBS/DAY

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*Outfall: 117 Effective Dates: 01/05/2011 to 01/04/2016*

<u>Parameter</u>	<u>Season</u>	<u>Limit Type</u>	<u>Limits</u>
<b>AMMONIA NITROGEN LBS/CFS STREAMFLOW</b>			
	JAN	30 Day Average	11.5 LBS/CFS/D
	JAN	Daily Maximum	16.3 LBS/CFS/D
	FEB	30 Day Average	11.5 LBS/CFS/D
	FEB	Daily Maximum	16.3 LBS/CFS/D
	MAR	30 Day Average	4.5 LBS/CFS/D
	MAR	Daily Maximum	6.4 LBS/CFS/D
	APR	30 Day Average	4.5 LBS/CFS/D
	APR	Daily Maximum	6.4 LBS/CFS/D
	MAY	30 Day Average	4.5 LBS/CFS/D
	MAY	Daily Maximum	6.4 LBS/CFS/D
	JUN	30 Day Average	3.6 LBS/CFS/D
	JUN	Daily Maximum	6.4 LBS/CFS/D
	JUL	30 Day Average	4.7 LBS/CFS/D
	JUL	Daily Maximum	7.7 LBS/CFS/D
	AUG	30 Day Average	4.2 LBS/CFS/D
	AUG	Daily Maximum	7.7 LBS/CFS/D
	SEP	30 Day Average	4.2 LBS/CFS/D
	SEP	Daily Maximum	6.4 LBS/CFS/D
	OCT	30 Day Average	4.5 LBS/CFS/D
	OCT	Daily Maximum	6.4 LBS/CFS/D
	NOV	30 Day Average	4.5 LBS/CFS/D
	NOV	Daily Maximum	6.4 LBS/CFS/D
	DEC	30 Day Average	4.5 LBS/CFS/D
	DEC	Daily Maximum	6.4 LBS/CFS/D



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<i>Outfall: 117 Effective Dates: 01/05/2011 to 01/04/2016</i>			
<u>Parameter</u>	<u>Season</u>	<u>Limit Type</u>	<u>Limits</u>
<b>CBOD5 LB/DAY/CFS</b>			
	Yearly	30 Day Average	20 LBS/CFS/D
<b>E. COLI</b>			
	MAR	Geometric Mean	126 #/100 ML
	APR	Geometric Mean	126 #/100 ML
	MAY	Geometric Mean	126 #/100 ML
	JUN	Geometric Mean	126 #/100 ML
	JUL	Geometric Mean	126 #/100 ML
	AUG	Geometric Mean	126 #/100 ML
	SEP	Geometric Mean	126 #/100 ML
	OCT	Geometric Mean	126 #/100 ML
	NOV	Geometric Mean	126 #/100 ML

**Facility Name:** CEDAR RAPIDS CITY OF STP

**Permit Number:** 5715001

### **Monitoring and Reporting Requirements**

- (a) Samples and measurements taken shall be representative of the volume and nature of the monitored wastewater.
- (b) Analytical and sampling methods specified in 40 CFR Part 136 or other methods approved in writing by the department shall be utilized. Samples collected for operational testing need not be analyzed by approved analytical methods; however, commonly accepted test methods should be used.
- (c) You are required to report all data including calculated results needed to determine compliance with the limitations contained in this permit. The results of any monitoring not specified in this permit performed at the compliance monitoring point and analyzed according to 40 CFR Part 136 shall be included in the calculation and reporting of any data submitted in accordance with this permit. This includes daily maximums and minimums and 30-day and 7-day averages for all parameters that have concentration (mg/l) and mass (lbs/day) limits. In addition, flow data shall be reported in million gallons per day (MGD).
- (d) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and shall be submitted to the appropriate regional field office of the department by the fifteenth day following the close of the reporting period. Your reporting period is on a MONTHLY basis, ending on the last day of each reporting period.
- (e) Any records of monitoring activities and results shall include for all samples: the date, exact place and time of the sampling; the dates the analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses.
- (f) Chapter 63 of the Iowa Administrative Code contains further explanation of these monitoring requirements.

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Outfall	Wastewater Parameter	Sample Frequency	Sample Type	Monitoring Location
The following monitoring requirements shall be in effect from 01/05/2011 to 01/04/2016				
001	CBOD5	7/WEEK OR DAILY	24 HOUR COMPOSITE	PRETREATMENT RAW WASTE LINE
001	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	PRETREATMENT RAW WASTE LINE
001	PH	7/WEEK OR DAILY	MEASUREMENT	PRETREATMENT RAW WASTE LINE
001	TEMPERATURE	7/WEEK OR DAILY	MEASUREMENT	PRETREATMENT RAW WASTE LINE
001	TOTAL SUSPENDED SOLIDS	7/WEEK OR DAILY	24 HOUR COMPOSITE	PRETREATMENT RAW WASTE LINE
001	CBOD5	7/WEEK OR DAILY	24 HOUR COMPOSITE	MUNICIPAL RAW WASTE LINE
001	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	MUNICIPAL RAW WASTE LINE
001	PH	7/WEEK OR DAILY	MEASUREMENT	MUNICIPAL RAW WASTE LINE
001	TEMPERATURE	7/WEEK OR DAILY	MEASUREMENT	MUNICIPAL RAW WASTE LINE
001	TOTAL SUSPENDED SOLIDS	7/WEEK OR DAILY	24 HOUR COMPOSITE	MUNICIPAL RAW WASTE LINE
001	CBOD5	7/WEEK OR DAILY	CALCULATED	TOTAL RAW WASTE
001	FLOW	7/WEEK OR DAILY	CALCULATED	TOTAL RAW WASTE
001	TOTAL SUSPENDED SOLIDS	7/WEEK OR DAILY	CALCULATED	TOTAL RAW WASTE
001	STREAM FLOW	7/WEEK OR DAILY	MEASUREMENT	STREAM FLOW AT USGS GAGE 05464500
001	BATHYMETRIC REPORT	1 EVERY 12 MONTHS	VISUAL	FINAL EFFLUENT

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Outfall	Wastewater Parameter	Sample Frequency	Sample Type	Monitoring Location
The following monitoring requirements shall be in effect from 01/05/2011 to 01/04/2016				
001	ACUTE TOXICITY, CERIODAPHNIA	1 EVERY 12 MONTHS	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	ACUTE TOXICITY, PIMEPHALES	1 EVERY 12 MONTHS	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	AMMONIA NITROGEN (N)	7/WEEK OR DAILY	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	AMMONIA NITROGEN LBS/CFS STREAMFLOW	7/WEEK OR DAILY	CALCULATED	EFFLUENT AFTER DISINFECTION
001	CADMIUM, TOTAL (AS CD)	2 TIMES PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	CBOD5	7/WEEK OR DAILY	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	CBOD5 LB/DAY/CFS	7/WEEK OR DAILY	CALCULATED	EFFLUENT AFTER DISINFECTION
001	CHLORINE, TOTAL RESIDUAL	7/WEEK OR DAILY	GRAB	EFFLUENT AFTER DISINFECTION
001	CHROMIUM, HEXAVALENT (AS CR)	1 EVERY MONTH	GRAB	EFFLUENT AFTER DISINFECTION
001	COPPER, TOTAL (AS CU)	1 TIME PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	CYANIDE, TOTAL (AS CN)	1 EVERY MONTH	GRAB	EFFLUENT AFTER DISINFECTION
001	E. COLI	1 EVERY 3 MONTHS	GRAB	EFFLUENT AFTER DISINFECTION
001	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	EFFLUENT AFTER DISINFECTION
001	LEAD, TOTAL (AS PB)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	MERCURY, TOTAL (AS HG)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	NICKEL, TOTAL (AS NI)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	PH (MINIMUM - MAXIMUM)	7/WEEK OR DAILY	MEASUREMENT	EFFLUENT AFTER DISINFECTION
001	SELENIUM, TOTAL (AS SE)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	SILVER, TOTAL (AS AG)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	TEMPERATURE	7/WEEK OR DAILY	MEASUREMENT	EFFLUENT AFTER DISINFECTION
001	TOTAL SUSPENDED SOLIDS	7/WEEK OR DAILY	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	ZINC, TOTAL (AS ZN)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION

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Outfall	Wastewater Parameter	Sample Frequency	Sample Type	Monitoring Location
The following monitoring requirements shall be in effect from 01/05/2011 to 01/04/2016				
001	30-MINUTE SETTLEABILITY	7/WEEK OR DAILY	GRAB	CARBONACEOUS ACTIVATED SLUDGE AERATION BASIN CONTENTS
001	DISSOLVED OXYGEN (MINIMUM)	7/WEEK OR DAILY	MEASUREMENT	CARBONACEOUS ACTIVATED SLUDGE AERATION BASIN CONTENTS
001	SOLIDS, MIXED LIQUOR SUSPENDED	7/WEEK OR DAILY	GRAB	CARBONACEOUS ACTIVATED SLUDGE AERATION BASIN CONTENTS
001	TEMPERATURE	7/WEEK OR DAILY	MEASUREMENT	CARBONACEOUS ACTIVATED SLUDGE AERATION BASIN CONTENTS
001	30-MINUTE SETTLEABILITY	7/WEEK OR DAILY	GRAB	NITRIFICATION ACTIVATED SLUDGE AERATION BASIN CONTENTS
001	DISSOLVED OXYGEN (MINIMUM)	7/WEEK OR DAILY	MEASUREMENT	NITRIFICATION ACTIVATED SLUDGE AERATION BASIN CONTENTS
001	SOLIDS, MIXED LIQUOR SUSPENDED	7/WEEK OR DAILY	GRAB	NITRIFICATION ACTIVATED SLUDGE AERATION BASIN CONTENTS
001	TEMPERATURE	7/WEEK OR DAILY	MEASUREMENT	NITRIFICATION ACTIVATED SLUDGE AERATION BASIN CONTENTS

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Outfall	Wastewater Parameter	Sample Frequency	Sample Type	Monitoring Location
The following monitoring requirements shall be in effect from 01/05/2011 to 01/04/2016				
004	AMMONIA NITROGEN (N)	7/WEEK OR DAILY	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
004	AMMONIA NITROGEN LBS/CFS STREAMFLOW	7/WEEK OR DAILY	CALCULATED	EFFLUENT AFTER DISINFECTION
004	CADMIUM, TOTAL (AS CD)	2 TIMES PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
004	CBOD5	7/WEEK OR DAILY	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
004	CBOD5 LB/DAY/CFS	7/WEEK OR DAILY	CALCULATED	EFFLUENT AFTER DISINFECTION
004	CHLORIDE (AS CL)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
004	CHLORINE, TOTAL RESIDUAL	7/WEEK OR DAILY	GRAB	EFFLUENT AFTER DISINFECTION
004	CHROMIUM, HEXAVALENT (AS CR)	1 TIME PER WEEK	GRAB	EFFLUENT AFTER DISINFECTION
004	COPPER, TOTAL (AS CU)	1 TIME PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
004	CYANIDE, TOTAL (AS CN)	1 TIME PER WEEK	GRAB	EFFLUENT AFTER DISINFECTION
004	E. COLI	1 EVERY 3 MONTHS	GRAB	EFFLUENT AFTER DISINFECTION
004	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	EFFLUENT AFTER DISINFECTION
004	LEAD, TOTAL (AS PB)	2 TIMES PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
004	MERCURY, TOTAL (AS HG)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
004	NICKEL, TOTAL (AS NI)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
004	PH	7/WEEK OR DAILY	MEASUREMENT	EFFLUENT AFTER DISINFECTION
004	SELENIUM, TOTAL (AS SE)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
004	SILVER, TOTAL (AS AG)	2 TIMES PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
004	TEMPERATURE	7/WEEK OR DAILY	MEASUREMENT	EFFLUENT AFTER DISINFECTION
004	TOTAL SUSPENDED SOLIDS	7/WEEK OR DAILY	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
004	ZINC, TOTAL (AS ZN)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION

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Outfall	Wastewater Parameter	Sample Frequency	Sample Type	Monitoring Location
The following monitoring requirements shall be in effect from 01/05/2011 to 01/04/2016				
117	AMMONIA NITROGEN (N)	7/WEEK OR DAILY	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
117	AMMONIA NITROGEN LBS/CFS STREAMFLOW	7/WEEK OR DAILY	CALCULATED	EFFLUENT AFTER DISINFECTION
117	CADMIUM, TOTAL (AS CD)	2 TIMES PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
117	CBOD5	7/WEEK OR DAILY	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
117	CBOD5 LB/DAY/CFS	7/WEEK OR DAILY	CALCULATED	EFFLUENT AFTER DISINFECTION
117	CHLORINE, TOTAL RESIDUAL	7/WEEK OR DAILY	GRAB	EFFLUENT AFTER DISINFECTION
117	CHROMIUM, HEXAVALENT (AS CR)	1 EVERY MONTH	GRAB	EFFLUENT AFTER DISINFECTION
117	COPPER, TOTAL (AS CU)	1 TIME PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
117	CYANIDE, TOTAL (AS CN)	1 EVERY MONTH	GRAB	EFFLUENT AFTER DISINFECTION
117	E. COLI	1 EVERY 3 MONTHS	GRAB	EFFLUENT AFTER DISINFECTION
117	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	EFFLUENT AFTER DISINFECTION
117	LEAD, TOTAL (AS PB)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
117	MERCURY, TOTAL (AS HG)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
117	NICKEL, TOTAL (AS NI)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
117	PH (MINIMUM - MAXIMUM)	7/WEEK OR DAILY	MEASUREMENT	EFFLUENT AFTER DISINFECTION
117	SELENIUM, TOTAL (AS SE)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
117	SILVER, TOTAL (AS AG)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
117	TEMPERATURE	7/WEEK OR DAILY	MEASUREMENT	EFFLUENT AFTER DISINFECTION
117	TOTAL SUSPENDED SOLIDS	7/WEEK OR DAILY	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
117	ZINC, TOTAL (AS ZN)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION

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### **Special Monitoring Requirements**

<b>Outfall #</b>	<b>Description</b>
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001, 004	<b>FLOW</b>
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017	The samples for the municipal raw waste line shall be collected at the pumped flow sampling location.
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The samples for the pretreatment raw waste line shall be collected at the anaerobic pretreatment sampling location.

In addition to reporting the influent flow, CBOD5 and TSS concentrations and mass, and temperature and pH results on each raw waste line, the total treatment facility influent for flow, CBOD5, and TSS shall be calculated. The total daily influent flow shall be calculated by summing the flows from the municipal and pretreatment lines, and shall not include any recycle flows. The total CBOD5 and TSS influent mass (in lbs/day) shall be calculated by adding the influent load (in lbs/day) from the municipal and pretreatment influent lines. The total raw waste concentration (in mg/l) for CBOD5 and TSS shall be calculated by dividing the influent mass sums by (8.34 times the total raw waste flow).

For Outfall 001 (diffuser), the final effluent flow shall be used to calculate the mass (lbs/day) of each pollutant discharged from the treatment works and will be used in the lbs/cfs/day calculations. For Outfall 004 (shoreline), the total effluent flow in mgd during the discharge period and the average effluent concentration during the discharge period shall be used to calculate the mass (lbs/day) of each pollutant discharged from the treatment works.

#### **E. COLI**

The average limit for E. coli of 126 org/100 ml specified in the Effluent Limitations section of this permit is a geometric mean, not a 30-day average.

The facility must collect and analyze a minimum of five samples in one calendar month during each 3-month period from March 15 to November 15. The 3-month periods are March - May, June - August, and September - November. The collection of five samples in each 3-month period will result in a minimum of 15 samples being collected during a calendar year. For example, for the first 3-month period, the operator may choose April as the calendar month to collect the 5 individual fecal coliform samples to determine compliance with the limits. The operator may also choose the months of March or May as well, as long as each of the 5 samples is collected during a single calendar month. The same principle applies to the other two 3-month periods during the disinfection season. The following requirements apply to the individual samples collected in one calendar month:

Samples must be spaced over one calendar month.

No more than one sample can be collected on any one day.

There must be a minimum of two days between each sample.

No more than two samples may be collected in a period of seven consecutive days.

If the effluent has been chlorinated the samples shall be analyzed using the Most Probable Number method found in Standard Method 9223B (Colilert® or Colilert-18® made by IDEXX Laboratories, Inc.). If the effluent has not been chlorinated the samples shall be analyzed using either the MPN method above or EPA Method 1603: Escherichia coli (E. coli) in water by membrane filtration using modified membrane-thermotolerant E. coli agar (modified mTEC) or mColiBlue-24® made by the Hach Company.

Each individual sample result will be compared to the sample maximum limit to determine compliance. The geometric mean must be calculated using all valid sample results collected during a month. The geometric mean formula is as follows: Geometric Mean = (Sample one



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\* Sample two \* Sample three \* Sample four \* Sample five... Sample N<sup>^(1/N)</sup>, which is the Nth root of the result of the multiplication of all of the sample results where N = the number of samples. If a sample result is a less than value, the value reported by the lab without the less than sign should be used in the geometric mean calculation.

The geometric mean can be calculated in one of the following ways:

Use a scientific calculator that can calculate the powers of numbers.

Enter the samples in Microsoft Excel and use the function "GEOMEAN" to perform the calculation.

Use the geometric mean calculator on the Iowa DNR webpage at: <http://www.iowadnr.com/water/npdes/calculator.html>.

### **MERCURY, TOTAL (AS HG)**

The permittee shall conduct analyses for mercury using an EPA approved method listed in 40 CFR 136 that is sufficiently sensitive. The method used will be considered sufficiently sensitive if the minimum level is at or below 0.15 ug/L, the water quality standard for mercury that applies to the receiving stream.

### **FLOW**

In order to meet operational requirements, a daily record of the USGS gauge will be recorded at 0100 hours. When gauge reads 12,900 CFS the following 23 hour period is considered a day at this level and appropriate samples as listed in the permit will be collected.

### **BATHYMETRIC REPORT**

The facility is required to perform the following actions:

1. On a monthly basis between August and February, the diffuser shall be visually inspected from the north bank of the river to verify that none of the plant effluent is being discharged through the outlet structure at Outfall 004 (shoreline), that 100% of the flow is being discharged through the diffuser pipe, and that the discharge is occurring across the entire width of available river channel. The date of the monthly inspection shall be noted in the MOR.
2. Once per year when the flow in the Cedar River is low enough to allow access to the top of the diffuser pipe, the condition of each check valve outlet diffuser shall be inspected. The date of the inspection shall be noted in the MOR. This requirement will be waived if the Cedar River is not low enough to allow access to the top of the diffuser pipe; however, an inspection of the condition of each check valve outlet diffuser shall be conducted at least once every 5 years.
3. Biannually between January and February the distribution and mixing of plant effluent across the full width of the Cedar River shall be visually assessed with infrared photography. If the infrared photography option is not available, an alternative approach shall be used to assess the distribution and mixing of the plant effluent. A report describing the results of the annual inspection shall be sent to the address below.
4. Once per year the river cross section from cleanout manhole to cleanout manhole shall be surveyed during low flows. The surveyed cross section should be compared to the original design drawings and previous cross section surveys to detect any long-term trends with respect to the Cedar River cross section. A report describing the results of the cross section survey shall be sent to the address below. This requirement will be waived if the Cedar River is not low enough to allow access to cleanout manholes; however, a the river cross section shall be surveyed at least once every five years.
5. Once every five years, the diffuser pipe shall be inspected by remote camera or diver. A report describing the results of the remote camera or diver inspection shall be sent to the address below. Field Office 1 in Manchester must be notified prior to any diversion of the plant effluent to the shoreline discharge.
6. Check valve diffuser outlets should be sealed off and opened as appropriate, according to the results of the above inspections. At any given time, the appropriate number of check valve diffuser outlets should be in service to achieve uniform distribution (80% mixing in the Cedar River). Each time diffuser ports are sealed off or opened, field data must be collected to characterize the spatial mixing of the effluent with the river flow to ensure that the diffuser is uniformly distributing the plant effluent.

The reports shall be sent to the following address: Iowa Department of Natural Resources, NPDES Section, 502 E. 9th Street, Des Moines, IA 50319

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### **AMMONIA NITROGEN (N)**

Ammonia shall be sampled and analyzed using an EPA approved method specified in 40 CFR 136 or using the Timberline Method Ammonia-001 alternative test procedure.

### **E. COLI**

The average limit for E. coli of 126 org/100 ml specified in the Effluent Limitations section of this permit is a geometric mean, not a 30-day average.

The facility must collect and analyze a minimum of five samples in one calendar month during each 3-month period from March 15 to November 15. The 3-month periods are March - May, June - August, and September - November. The collection of five samples in each 3-month period will result in a minimum of 15 samples being collected during a calendar year. For example, for the first 3-month period, the operator may choose April as the calendar month to collect the 5 individual fecal coliform samples to determine compliance with the limits. The operator may also choose the months of March or May as well, as long as each of the 5 samples is collected during a single calendar month. The same principle applies to the other two 3-month periods during the disinfection season. The following requirements apply to the individual samples collected in one calendar month:

Samples must be spaced over one calendar month.

No more than one sample can be collected on any one day.

There must be a minimum of two days between each sample.

No more than two samples may be collected in a period of seven consecutive days.

If the effluent has been chlorinated the samples shall be analyzed using the Most Probable Number method found in Standard Method 9223B (Colilert® or Colilert-18® made by IDEXX Laboratories, Inc.). If the effluent has not been chlorinated the samples shall be analyzed using either the MPN method above or EPA Method 1603: Escherichia coli (E. coli) in water by membrane filtration using modified membrane-thermotolerant E. coli agar (modified mTEC) or mColiBlue-24® made by the Hach Company.

Each individual sample result will be compared to the sample maximum limit to determine compliance. The geometric mean must be calculated using all valid sample results collected during a month. The geometric mean formula is as follows: Geometric Mean =  $(\text{Sample one} * \text{Sample two} * \text{Sample three} * \text{Sample four} * \text{Sample five} \dots \text{Sample N})^{(1/N)}$ , which is the Nth root of the result of the multiplication of all of the sample results where N = the number of samples. If a sample result is a less than value, the value reported by the lab without the less than sign should be used in the geometric mean calculation.

The geometric mean can be calculated in one of the following ways:

Use a scientific calculator that can calculate the powers of numbers.

Enter the samples in Microsoft Excel and use the function "GEOMEAN" to perform the calculation.

Use the geometric mean calculator on the Iowa DNR webpage at: <http://www.iowadnr.com/water/npdes/calculator.html>.

### **MERCURY, TOTAL (AS HG)**

The permittee shall conduct analyses for mercury using an EPA approved method listed in 40 CFR 136 that is sufficiently sensitive. The method used will be considered sufficiently sensitive if the minimum level is at or below 0.15 ug/L, the water quality standard for mercury that applies to the receiving stream.

### **Equations for Calculating Compliance with the lbs/cfs/day CBOD<sub>5</sub> and Ammonia Nitrogen Limits**

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The following equations shall be used to calculate compliance with the flow variable lbs/cfs/day CBOD<sub>5</sub> and ammonia nitrogen limits listed in the effluent limitations section of this permit for Outfalls 001 (diffuser) and 004 (shoreline). The equations are to be used by the City to calculate the daily mass of CBOD<sub>5</sub> and ammonia nitrogen discharged to the Cedar River in terms of lbs/cfs/day.

**Daily lbs/cfs/day Calculations:**

$$\frac{Q_D (8.34)(C_D - 3.7)}{Q_R} \quad (1) \quad \text{CBOD}_5 \qquad \frac{Q_D (8.34)(C_D)}{Q_R} \quad (2) \quad \text{NH}_3\text{-N}$$

Where:  $Q_D$  is the daily effluent flow in mgd  
 $C_D$  is the daily 24-hour composite effluent concentration in mg/l  
 $Q_R$  is the daily river flow in cfs

For Outfall 001 (diffuser), the 30-day average mass in lbs/cfs/day shall be calculated by dividing the sum of the total daily discharges in lbs/cfs/day during a calendar month by the total number of days during the month measurements were made. The calculated 30-day average and daily maximum values cannot exceed the average or maximum lbs/cfs/day limits listed for CBOD<sub>5</sub> and ammonia nitrogen in the effluent limitations section of this permit. The monthly operating report (MOR) shall show the results of the daily lbs/cfs/day calculations and the 30-day average calculations. The MOR will also record the daily river flow (in cfs), the daily WWTP effluent flow, the daily effluent ammonia nitrogen concentration in mg/l, and the daily effluent CBOD<sub>5</sub> concentration in mg/l. The daily river flow shall be obtained from USGS gage number 05464500 on the Cedar River at Cedar Rapids.

For Outfall 004 (shoreline), the calculation requirements are the same as for Outfall 001, but  $Q_D$  will be the total effluent flow in mgd during the discharge from Outfall 004, and  $C_D$  is the average effluent concentration in mg/l during the discharge from Outfall 004. As it is anticipated that the discharge from Outfall 004 will be less than one day, daily values are not required for  $Q_D$  and  $C_D$ . The  $Q_R$  used in the equations for the shoreline discharge will remain as the daily river flow in cfs. The MOR will record the daily river flow (in cfs), and will record the following during the discharge from Outfall 004; the average effluent flow, the average effluent ammonia nitrogen concentration in mg/l, and the average effluent CBOD<sub>5</sub> concentration in mg/l. The daily river flow shall be obtained from USGS gage number 05464500 on the Cedar River at Cedar Rapids.

The City must comply with the concentration limits for CBOD<sub>5</sub> listed in the effluent limitations section of this permit in addition to the lbs/cfs/day limits for CBOD<sub>5</sub>. As the river flow increases, the amount of CBOD<sub>5</sub> discharged at an lbs/cfs/day rate shall not exceed the concentration limits of 113 mg/l 30-day average and 277 mg/l daily maximum.

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Outfall Number: 001

### **Ceriodaphnia and Pimephales Toxicity Effluent Testing**

1. For facilities that have not been required to conduct toxicity testing by a previous NPDES permit, the initial annual toxicity test shall be conducted within three (3) months of permit issuance. For facilities that have been required to conduct toxicity testing by a previous NPDES permit, the initial annual toxicity test shall be conducted within twelve months (12) of the last toxicity test.
2. The test organisms that are to be used for acute toxicity testing shall be *Ceriodaphnia dubia* and *Pimephales promelas*. The acute toxicity testing procedures used to demonstrate compliance with permit limits shall be those listed in 40 CFR Part 136 and adopted by reference in rule 567--63.1(1). The method for measuring acute toxicity is specified in USEPA, October 2002, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., EPA 821-R-02-012.
3. The diluted effluent sample must contain a minimum of 21.80 % effluent and no more than 78.20 % of culture water.
4. One valid positive toxicity result will require, at a minimum, quarterly testing for effluent toxicity until three successive tests are determined not to be positive.
5. Two successive valid positive toxicity results or three positive results out of five successive valid effluent toxicity tests will require a toxicity reduction evaluation to be completed to eliminate the toxicity.
6. A non-toxic test result shall be indicated as a "1" on the monthly operation report. A toxic test result shall be indicated as a "2" on the monthly operation report. DNR Form 542-1381 shall also be submitted to the DNR field office along with the monthly operation report.

### **Ceriodaphnia and Pimephales Toxicity Effluent Limits**

The 30 day average mass limit of "1" for the parameters Acute Toxicity, *Ceriodaphnia* and Acute Toxicity, *Pimephales* means no positive toxicity results.

Definition: "Positive toxicity result" means a statistical difference of mortality rate between the control and the diluted effluent sample. For more information see USEPA, October 2002, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, U.S. Environmental Protection Agency, Office of Water, Washington, D.C., EPA 821-R-02-012.

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### **Design Capacity**

#### **Design: 1**

The design capacity for the treatment works is specified in Construction Permit Number 95-133-S, issued Thursday, March 16, 1995.

The treatment plant is designed to treat:

- \* An average dry weather (ADW) flow of 43.7700 Million Gallons Per Day (MGD).
- \* An average wet weather (AWW) flow of 56.0000 Million Gallons Per Day (MGD).
- \* A maximum wet weather (MWW) flow of 86.9500 Million Gallons Per Day (MGD).
- \* A design 5-day biochemical oxygen demand (BOD5) load of 406000 lbs/day.
- \* A design Total Kjeldahl Nitrogen (TKN) load of 18500.00 lbs/day.

Operator Certification Type/Grade: WW/IV

Wastes in such volumes or quantities as to exceed the design capacity of the treatment works or reduce the effluent quality below that specified in the operation permit of the treatment works are considered to be a waste which interferes with the operation or performance of the treatment works and are prohibited by rule IAC 567-62.1(7).

**Facility Name:** CEDAR RAPIDS CITY OF STP

**Permit Number:** 5715001

### **SEWAGE SLUDGE HANDLING AND DISPOSAL REQUIREMENTS**

"Sewage sludge" is solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge does not include the grit and screenings generated during preliminary treatment.

1. The permittee shall comply with all existing Federal and State laws and regulations that apply to the use and disposal of sewage sludge and with technical standards developed pursuant to Section 405(d) of the Clean Water Act when such standards are promulgated. If an applicable numerical limit or management practice for pollutants in sewage sludge is promulgated after issuance of this permit that is more stringent than a sludge pollutant limit or management practice specified in existing Federal or State laws or regulations, this permit shall be modified, or revoked and reissued, to conform to the regulations promulgated under Section 405(d) of the Clean Water Act. The permittee shall comply with the limitation no later than the compliance deadline specified in the applicable regulations.
2. The permittee shall provide written notice to the Department of Natural Resources prior to any planned changes in sludge disposal practices.
3. Land application of sewage sludge shall be conducted in accordance with criteria established in rule IAC 567--67.1 through 67.11 (455B).

**Facility Name:** CEDAR RAPIDS CITY OF STP

**Permit Number:** 5715001

### **SIGNIFICANT INDUSTRIAL USER LIMITATIONS, MONITORING AND REPORTING REQUIREMENTS**

1. You shall require all users of your facility to comply with Sections 204(b), 307, and 308 of the Clean Water Act.

Section 204(b) requires that all users of the treatment works constructed with funds provided under Sections 201(g) or 601 of the Act to pay their proportionate share of the costs of operation, maintenance and replacement of the treatment works.

Section 307 of the Act requires users to comply with pretreatment standards promulgated by EPA for pollutants that would cause interference with the treatment process or would pass through the treatment works.

Section 308 of the Act requires users to allow access at reasonable times to state and EPA inspectors for the purpose of sampling the discharge, reviewing, and copying records.

2. You shall continue to implement the pretreatment program approved **October 29, 1984** and any amendments thereto.
3. An annual report in the form prescribed by the Department is to be submitted by March 1<sup>st</sup> of each year describing the pretreatment program activities for the preceding calendar year.
4. The City shall evaluate the adequacy of its local limits to meet the general prohibitions against interference and pass through listed in 40 CFR 403.5(a) and the specific prohibitions listed in 40 CFR 403.5(b). At a minimum this evaluation shall consist of the following:
  - (a) Identify each pollutant with the potential to cause process inhibition, pass through the treatment plant in concentrations that will violate NPDES permit limits of water quality standards, endanger POTW worker health and safety or degrade sludge quality.
  - (b) For each treatment plant, determine the maximum allowable headworks loading for each pollutant identified in item #4(a). that will prevent interference or a pass through.
  - (c) After accounting for the contribution of each pollutant from uncontrolled (i.e.: domestic/commercial) sources to each treatment plant, determine the maximum allowable industrial loading for each pollutant identified in item #4(a).
  - (d) Complete the evaluation and submit to the Department, by **January 1, 2012** a report containing the following information:
    - 1) A list of pollutants identified in item #4(a). For each pollutant, state the reason(s) for its inclusion (e.g. potential to cause interference, potential to cause pass through, etc.).
    - 2) The report shall contain all calculations used to determine the maximum allowable headworks loadings and shall identify the source(s) of all data used (e.g. literature value, site specific measurement, etc.).
    - 3) The contribution of each pollutant identified in item #4(d)1 to each treatment plant from uncontrolled sources and an explanation of how each contribution was determined.
    - 4) The allocation of the maximum allowable headworks loading for each pollutant to each treatment plant, and an explanation of how the allowable loadings will be allocated to significant industrial users regulated by the City's pretreatment program.
5. The City shall evaluate the approved pretreatment program for compliance with 40 CFR 403 and Iowa Administrative Code 567 – Chapter 62, specifically with regards to the pretreatment streamlining rule published in the Federal Register on October 14, 2005. Complete the evaluation and submit to the Department a report containing the findings of the evaluation, including a proposal for modifications to correct any deficiencies that are identified, by **January 1, 2012**.

## STANDARD CONDITIONS

### 1. ADMINISTRATIVE RULES

Rules of this Department that govern the operation of your facility in connection with this permit are published in Part 567 of the Iowa Administrative Code (IAC) in Chapters 60-65, 67, and 121. Reference to the term “rule” in this permit means the designated provision of Part 567 of the IAC. Reference to the term “CFR” means the Code of Federal Regulations.

### 2. DEFINITIONS

- (a) 7 day average means the sum of the total daily discharges by mass, volume, or concentration during a 7 consecutive day period, divided by the total number of days during the period that measurements were made. Four 7 consecutive day periods shall be used each month to calculate the 7-day average. The first 7-day period shall begin with the first day of the month.
- (b) 30 day average means the sum of the total daily discharges by mass, volume, or concentration during a calendar month, divided by the total number of days during the month that measurements were made.
- (c) Daily maximum means the total discharge by mass, volume, or concentration during a twenty-four hour period.

### 3. DUTY TO COMPLY

You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Issuance of this permit does not relieve you of the responsibility to comply with all local, state and federal laws, ordinances, regulations or other legal requirements applying to the operation of your facility. *{See 40 CFR 122.41(a) and 567 IAC 64.7(4)“e”}*

### 4. DUTY TO PROVIDE INFORMATION

You must furnish to the Director, within a reasonable time, any information the Director may request to determine compliance with this permit or determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, in accordance with 567 IAC 64.3(11)(c). You must also furnish to the Director, upon request, copies of any records required to be kept by this permit.

### 5. NEED TO HALT OR REDUCE ACTIVITY

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. *{See 40 CFR 122.41(c) and 567 IAC 64.7(7)“j”}*

### 6. DUTY TO MITIGATE

You shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. *{See 40 CFR 122.41(d) and 567 IAC 64.7(7)“i”}*

### 7. PROPERTY RIGHTS

This permit does not convey any property rights of any sort or any exclusive privilege. *{See 567 IAC 64.4(3)“b”}*

### 8. TRANSFER OF TITLE OR OWNER ADDRESS CHANGE

If title to your facility, or any part of it, is transferred the new owner shall be subject to this permit. You are required to notify the new owner of the requirements of this permit in writing prior to any transfer of title. The Director shall be notified in writing within 30 days of the transfer. No transfer of the authorization to discharge from the facility represented by the permit shall take place prior to notifying the department of the transfer of title. Whenever the address of the owner is changed, the department shall be notified in writing within 30 days of the address change. Electronic notification is not sufficient; all title transfers or address changes must be reported to the department by mail. *{See 567 IAC 64.14}*

### 9. PROPER OPERATION AND MAINTENANCE

All facilities and control systems shall be operated as efficiently as possible and maintained in good working order. A sufficient number of staff, adequately trained and knowledgeable in the operation of your facility shall be retained at all times and adequate laboratory controls and appropriate quality assurance procedures shall be provided to maintain compliance with the conditions of this permit. *{See 40 CFR 122.41(e) and 567 IAC 64.7(7)“f”}*

### 10. PERMIT MODIFICATION, SUSPENSION OR REVOCATION

- (a) This permit may be modified, suspended, or revoked and reissued for cause including but not limited to those specified in 567 IAC 64.3(11).
- (b) This permit may be modified due to conditions or information on which this permit is based, including any new standard the department may adopt that would change the required effluent limits. *{See 567 IAC 64.3(11)}*
- (c) If a toxic pollutant is present in your discharge and more stringent standards for toxic pollutants are established under Section 307(a) of the Clean Water Act, this permit will be modified in accordance with the new standards. *{See 40 CFR 122.62(a)(6) and 567 IAC 64.7(7)“g”}*

The filing of a request for a permit modification, revocation or suspension, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

### 11. DUTY TO REAPPLY AND PERMIT CONTINUATION

If you wish to continue to discharge after the expiration date of this permit, you must file a complete application for reissuance at least 180 days prior to the expiration date of this permit. If a timely and sufficient application is submitted, this permit will remain in effect until the Department makes a final determination on the permit application. *{See 567 IAC 64.8(1) and Iowa Code 17A.18}*

### 12. SIGNATORY REQUIREMENTS

Applications, reports or other information submitted to the Department in connection with this permit must be signed and certified as required by 567 IAC 64.3(8).



## STANDARD CONDITIONS

### 13. TWENTY-FOUR HOUR REPORTING

You shall report any noncompliance that may endanger human health or the environment, including, but not limited to, violations of maximum daily limits for any toxic pollutant (listed as toxic under 307(a)(1) of the Clean Water Act) or hazardous substance (as designated in 40 CFR Part 116 pursuant to 311 of the Clean Water Act). Information shall be provided orally within 24 hours from the time you become aware of the circumstances. A written submission that includes a description of noncompliance and its cause; the period of noncompliance including exact dates and times, whether the noncompliance has been corrected or the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent a reoccurrence of the noncompliance must be provided within 5 days of the occurrence. *{See 567 IAC 63.12}*

### 14. OTHER NONCOMPLIANCE

You shall report all instances of noncompliance not reported under Condition #13 at the time monitoring reports are submitted. You shall give advance notice to the appropriate regional field office of the department of any planned activity which may result in noncompliance with permit requirements. *{See 567 IAC 63.14}*

### 15. PLANNED CHANGES

The permittee shall give notice to the appropriate regional field office of the department 30 days prior to any planned physical alterations or additions to the permitted facility. Notice is required only when:

- (a) Notice has not been given to any other section of the department: (Note: Facility expansions, production increases, or process modifications which may result in new or increased discharges of pollutants must be reported to the Director in advance. If such discharges will exceed effluent limitations, your report must include an application for a new permit. If any modification of, addition to, or construction of a disposal system is to be made, you must first obtain a written permit from this Department.) *{See 567 IAC 64.7(7)“a” and 64.2}*
- (b) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as defined in 567 IAC 60.2;
- (c) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices; or
- (d) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in the permit. *{See 567 IAC 63.13 and 63.14}*

### 16. EFFECT OF A PERMIT

Compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Sections 301, 302, 306, 307, 318, 403 and 405(a)-(b) of the Clean Water Act, and equivalent limitations and standards set out in 567 IAC Chapters 61 and 62. *{See 567 IAC 64.4(3)“a”}*

### 17. MONITORING AND RECORDS OF OPERATION

- (a) Maintenance of records. You shall retain for a minimum of three years all paper and electronic records of monitoring activities and results including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records. *{See 567 IAC 63.2(3)}*
- (b) Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than two years, or both. *{See 40 CFR 122.41(j)(5)}*

### 18. USE OF CERTIFIED LABORATORIES

Effective October 1, 1996, analyses of wastewater, groundwater or sewage sludge that are required to be submitted to the department as a result of this permit must be performed by a laboratory certified by the State of Iowa. Routine, on-site monitoring for pH, temperature, dissolved oxygen, total residual chlorine and other pollutants that must be analyzed immediately upon sample collection, settleable solids, physical measurements, and operational monitoring tests specified in 567 IAC 63.3(4) are excluded from this requirement.

### 19. INSPECTION OF PREMISES, RECORDS, EQUIPMENT, METHODS AND DISCHARGES

You are required to permit authorized personnel to:

- (a) Enter upon the premises where a regulated facility or activity is located or conducted or where records are kept under conditions of this permit.
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
- (c) Inspect, at reasonable times, any facilities, equipment, practices or operations regulated or required under this permit.
- (d) Sample or monitor, at reasonable times, to assure compliance or as otherwise authorized by the Clean Water Act.

### 20. FAILURE TO SUBMIT FEES

This permit may be revoked, in whole or in part, if the appropriate permit fees are not submitted within thirty (30) days of the date of notification that such fees are due. *{See 567 IAC 64.16(1)}*

### 21. OTHER INFORMATION

Where you become aware that you failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, you must promptly submit such facts or information. Where you become aware that you failed to submit any relevant facts in the submission of in any report to the director, including records of operation, you shall promptly submit such facts or information. *{See 567 IAC 60.4(2)“a” and 567 IAC 63.7}*

## STANDARD CONDITIONS

### 22. NOTICE OF CHANGED CONDITIONS

You are required to notify the director of any changes in existing conditions or information on which this permit is based. This includes, but is not limited to, the following:

- (a) If your facility is a publicly owned treatment works (POTW) or otherwise may accept waste for treatment from an indirect discharger or industrial contributor (See 567 IAC 64.3(5) for further notice requirements).
- (b) If your facility is a POTW and there is any substantial change in the volume or character of pollutants being introduced to the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit. *{See 40 CFR 122.42(b)}*
- (c) As soon as you know or have reason to believe that any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in this permit. *{See 40 CFR 122.42(a)}*
- (d) If you have begun or will begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.
- (e) No construction activity that will result in disturbance of one acre or more shall be initiated without first obtaining coverage under NPDES General Permit No. 2 for "Storm water discharge associated with construction activity".

### 23. BYPASSES

- (a) Definition. "Bypass" means the diversion of waste streams from any portion of a treatment facility or collection system. A bypass does not include internal operational waste stream diversions that are part of the design of the treatment facility, maintenance diversions where redundancy is provided, diversions of wastewater from one point in a collection system to another point in a collection system, or wastewater backups into buildings that are caused in the building lateral or private sewer line.
- (b) Prohibitions.
  - i. Bypasses from any portion of a treatment facility or from a sanitary sewer collection system designed to carry only sewage are prohibited.
  - ii. Bypass is prohibited and the department may not assess a civil penalty against a permittee for bypass if the permittee has complied with all of the following:
    - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
    - (2) There were no feasible alternatives to the bypass such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
    - (3) The permittee submitted notices as required by paragraph (d) of this section.

- (c) The Director may approve an anticipated bypass after considering its adverse effects if the Director determines that it will meet the three conditions listed above and a request for bypass has been submitted to the Department in accordance with 567 IAC 63.6(2).
- (d) Reporting bypasses. Bypasses shall be reported in accordance with 567 IAC 63.6.

### 24. UPSET PROVISION

- (a) Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (b) Effect of an upset. An upset constitutes an affirmative defense in an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph "c" of this condition are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- (c) Conditions necessary for demonstration of an upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate through properly signed operating logs or other relevant evidence that;
  - i. An upset occurred and that the permittee can identify the cause(s) of the upset;
  - ii. The permitted facility was at the time being properly operated;
  - iii. The permittee submitted notice of the upset to the Department in accordance with 567 IAC 63.6(3); and
  - iv. The permittee complied with any remedial measures required in accordance with 567 IAC 63.6(6)"b".
- (d) Burden of Proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

### 25. SEVERABILITY

The provisions of this permit are severable and if any provision or application of any provision to any circumstance is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding.